Spectroswiss

In a partnership with National Instruments, EPFL, & Dr. David Kilgour





EPFL Innovation Park | Building I | 1015 Lausanne | Switzerland T: +41 21 693 98 06 | M: +41 79 822 67 90 | info@spectroswiss.ch www.spectroswiss.ch



Spectroswiss offers advanced instrumentation and signal processing solutions designed to increase productivity and efficiency of life and environmental sciences research using FTMS.

Products & Services



FTMS Booster X1: High-performance data acquisition system

- Mass spectra with increased sensitivity and dynamic range via high-performance acquisition of time-domain data (transients)
- Real-time absorption mode FT (Orbitrap[™] FTMS) or magnitude mode FT (all FTMS instruments) with an embedded computer
- In-line digital signal processing & triggering with FPGA chip
- Measurements of large data sets with high duty cycles; unlimited detection periods in time-domain data acquisition
- Hardware interface to Orbitrap[™] FTMS & LTQ FT-ICR MS
- Works in parallel with commercial software, e.g., XCalibur™



Peak by Peak™: Advanced FTMS data analysis framework

- Analysis of large datasets of time-domain data and mass spectra in common formats, e.g., HDF5, DAT, ASCII, RAW
- Spectral and transient averaging of multiple LC-MS/MS runs
- Extensions: parallel algorithm for Fourier transform; timedomain data fitting; multiprocessing; peak-picking; noise thresholding; absorption mode FT software (Dr. Kilgour)
- On-demand file formats of input/output data, e.g., MGF, mzXML



NPlex Suite for neutron-encoded protein quantitation

- Increased productivity of protein quantitation with any number of isobaric mass tags, e.g., as in TMT™ or iTRAQ™ approaches
- Proprietary signal processing algorithms based on least-squares fitting of time-domain (transient) data
- Integrated turn-key solution for all series of Orbitrap[™] FTMS



NADEL ICR cells to upgrade your FT-ICR MS

- Improved mass accuracy with our patented narrow aperture detection electrode (NADEL) mass analyzers
- New frequency resonance in FT-ICR MS: ion detection at the cyclotron frequency
- Reduced effects of Coulombic (space charge) interactions
- Integrated turn-key solution for LTQ FT-ICR MS instruments

Spectroswiss LLC established in 2014 as a spin-off from EPFL by Dr. Yury O. Tsybin. We are located at the EPFL Innovation Park in Lausanne, Switzerland. Welcome!